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The Fight for the Customer

McKinsey Global Banking Annual Review 2015

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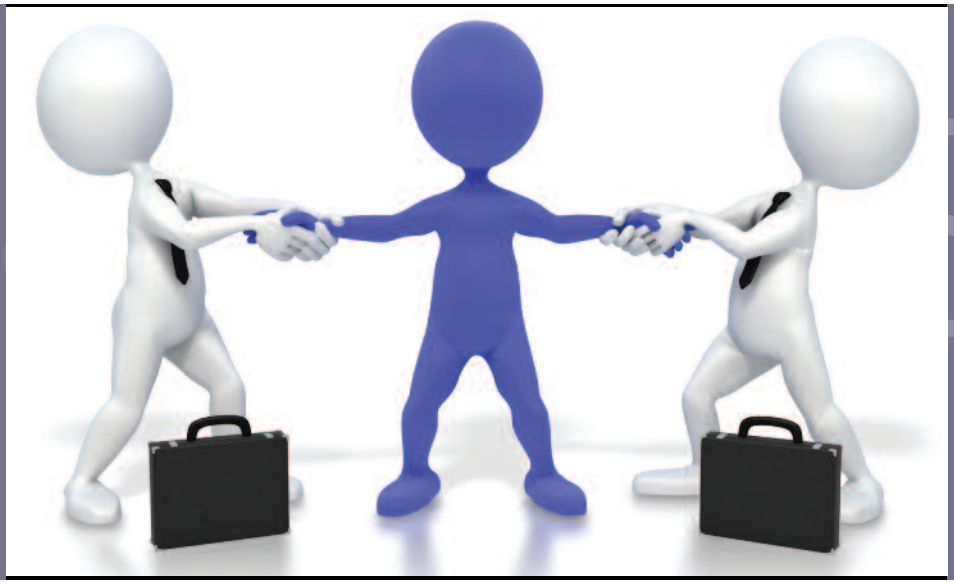

Executive Summary

For global banking, the roller-coaster ride of the past 10 years is at last coming to a halt. A new reality is taking hold. Return on equity (ROE) is stable at 9.5 percent (the third consecutive year in which returns were in line with the long-term [1980-2015] average), and profits are rising. Banks have begun to lower operating costs, and their risk costs have also fallen.

But this pause in the action may be short-lived. There are few loan-loss provisions left to release, and margins continue to fall across the globe. Cost-cutting is about the only cylinder still firing in the profit engine. Meanwhile, banks are under attack from new technology companies and others seeking to poach their customers. To date, banks' losses to attackers have been little more than a

rounding error. But as digitization accelerates, banks will be in a battle for the customer that will define the next 10 years for the industry.

In this, the fifth edition of McKinsey's Global Banking Annual Review, new research has generated a number of key findings:

- The fight to hold on to customer relationships will be a high-stakes struggle. We estimate that in five major retail banking businesses (consumer finance, mortgages, SME lending, retail payments and wealth management) from 10 to 40 percent of revenues (depending on the business) will be at risk by 2025, and between 20 and 60 percent of profits, with consumer finance the most vulnerable. Attackers will likely capture only a small portion of these businesses; most of banks' losses will come from margin compression as attackers force prices lower. Corporate and investment banking will be much less affected.
- Banking enters the fight from a position of strength. Worldwide, profits reached a record $1 trillion in 2014. The top 500 banks earned $613 billion, while smaller banks and other institutions claimed the rest. But these vast and highly dispersed profits are a magnet for attackers and their investors.
- China's banking profits have grown an astonishing 500 percent since 2006. Over the past few years, almost all global banking revenue growth came from China. To be sure, banking in China is not like elsewhere; state-owned banks dominate the sector, and transparency is lacking. Moreover, with asset markets falling and volatility reentering the system, growth may stall. But the rise of Chinese banking is one of the great stories of the past 10 years.
- Global ROE was stable at 9.5 percent in 2014, essentially unchanged from 2013. But margins are in steady decline, falling by 185 basis points in 2014, as interest rates remain low, competition intensifies and attackers start to undermine banks' economics.
- Many in the industry expect a rise in interest rates to provide structural support to profits. If rates rise the anticipated amount (which differs by

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market), Eurozone banks could add 2.3 percentage points, at most, to ROE, and U.S. banks 2 points. In neither case, however, will the improved ROE comfortably exceed cost of equity (COE), and banks are at risk of competing away most of the potential windfall.

This report details these findings and their implications for banks. The industry has a fight on its hands. To win, banks will have to beat newcomers at their own game, delivering intuitive and emotionally rich customer experiences, while also adding the digital skills needed to become nimble low-cost competitors. Banks need to capitalize fully on their biggest advantages, data and access to the customer, while also rebuilding trust. Banks that embrace the digital revolution can find success, holding off attackers with one hand and less nimble incumbents with the other.

Introduction

A sea change in banking industry economics is gathering strength. New technology and regulation threaten the linchpin of banks' economics: the customer relationship. Historically the banking industry has provided three main services: financing, investments and transactions. These businesses have varying levels of profitability, with cross-subsidies supporting the weaker ones. The customer relationship holds this web of activities together. But those relationships have often been weak – many retail customers do not think they have a relationship with their bank – and can be the result of inertia and the high cost of switching banks.

Technology and regulation are tearing at that web. Banks are losing customers to non-banks – including start-ups known as FinTechs, other more established tech companies, and shadow banks. FinTechs may pose a particularly strong threat; they are highly focused companies that continually improve their technology to deliver a more appealing and lower-cost experience to customers. Already they are detaching customer segments from incumbents, hindering banks' ability to cross-sell, stranding loss-leader businesses like basic lending, and transferring the ownership of vital customer data with its vast potential for new businesses. Even where they do not succeed in poaching customers, non-banks are forcing banks to lower their prices, reducing already thin margins.

Banks can take the battle for the customer – the defining dynamic of the next 10 years – to the upstarts, by mastering the customer relationship, creating an emotional connection and leveraging their data treasure to deliver a superior customer experience.

To be sure, several factors will have to break right for this digital disruption to reach its full potential. While not every geography will be equally affected, in many parts of the world, these factors are in fact coming together in ways that will unleash a radical disruption. In response, many banks will have to reset their strategic direction. They have two choices. They can take the battle for the customer – the defining dynamic of the next 10 years – to the upstarts, by mastering the customer relationship, creating an emotional connection and leveraging their data treasure to deliver a superior customer experience. Or they can retreat, excelling at the basic business of financing and providing their balance sheet to others for resale—another option, but one that requires substantial simplification and cost-cutting. The window for making this choice is narrowing; banks must decide soon, probably within three years, or the choice will be made for them.

■ ■ ■

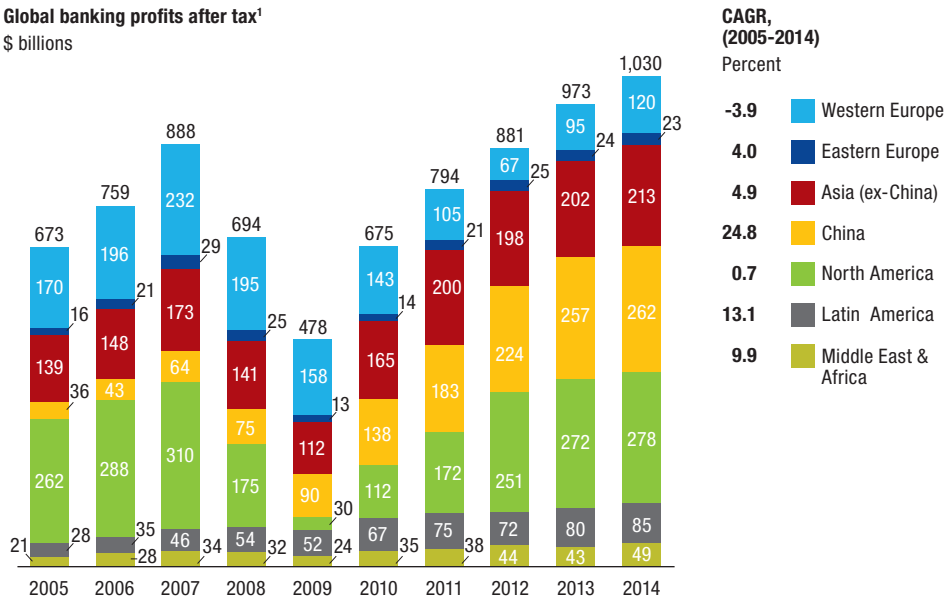
This is McKinsey's fifth annual report on the global banking industry. In producing it, we have drawn on the thinking of our clients and practitioners around the world, as well as the data and insights from our dedicated banking research, Panorama. We begin with a survey of the industry's present state, before moving on to an examination of the technologies and regulatory changes that are fraying the customer relationship. We conclude with a discussion of the two major changes banks can make to stay relevant in a radically changing financial services industry and introduce a new approach for banks to manage digital innovation.

The State of the Industry

After years of upheaval, global banking has settled into a new reality, characterized by stable returns and strong profits, but slow growth. Many banks are on a treadmill: as margins decline, they compensate by improving operational efficiency. Our scenario analysis reveals that these new economics are likely to prevail for the short to medium-term, although the system is susceptible to shocks. Many in the industry are waiting for an interest rate rise or some other structural lift to profits, but even if rates rise, that will be insufficient to fundamentally improve economics.

Exhibit 1

The global banking industry produced record after-tax profits of $1 trillion in 2014



[1] Total profit pools of all customer-driven banking activities, including retail and institutional asset management

Source: McKinsey Panorama – Global Banking Pools

The new reality

In one important way, 2014 was an exceptional year for the global banking industry.[1] After-tax profit hit an all-time record of $1 trillion, driven mainly by growth in China. That performance continued the gradual recovery from the financial crisis and for the second consecutive year surpassed the peak reached in 2007. It also continued another streak: banking profits continue to top those of any other global industry.

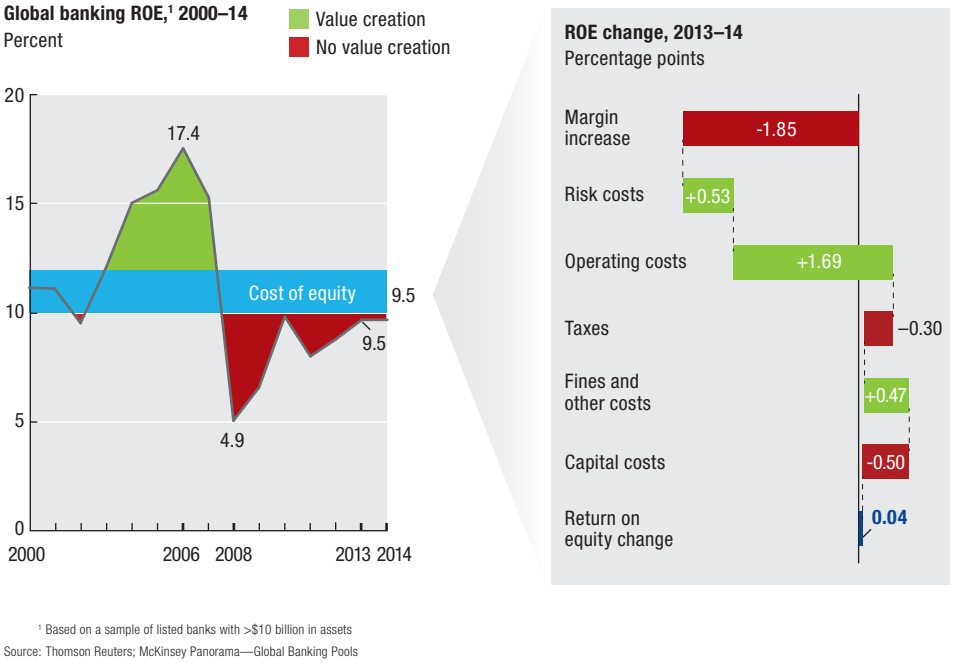
After-tax profit hit an all-time record of $1 trillion, driven mainly by growth in China.

Exhibit 1 shows some remarkable changes in banking profits. China's growth has been spectacular; profits have quintupled since 2007 (but now seem to be rapidly slowing). Latin America has also shown stellar growth. North America has recovered nicely from the financial crisis. The Middle East and Africa have grown steadily, although not as quickly as many observers expected. Eastern Europe peaked in 2007 and has never recovered; political upheaval on its borders has stalled growth in recent years. Western Europe also peaked in 2007, and

[1] In this report, "the banking industry" includes deposit-taking and lending institutions and other banks whose business is concentrated in investment management, servicing and processing. It does not include pure asset or wealth managers, or insurance companies.

Exhibit 2

Global banking ROE remained steady in 2014



[1] Based on a sample of listed banks with >$10 billion in assets

Source: Thomson Reuters; McKinsey Panorama—Global Banking Pools

profits today are only half of their previous level. (For more on regional banking performance from 2007 to 2014, see "How They Grew" on page 10.)

> Looking back at 2012-2014, it seems that banks have settled into a new reality, characterized by steady ROE, slow growth and strong cost control.

The $1 trillion in profits does not come cheap. requiring $11 trillion in capital to generate. Looking at ROE, the picture is slightly less impressive. ROE stabilized at 9.5 percent in 2014, down 4 basis points from 2013 (Exhibit 2).[2] Margins fell drastically and would have lowered ROE by 185 basis points. However, lower operating costs and better lending performance, along with a slowdown in legal fines and settlements, helped banks stay on an even keel.

In fact, performance in 2014 on many dimensions was a continuation of recent trends. Looking back at 2012-2014, it seems that banks have settled into a new reality, characterized by steady ROE, slow growth and strong cost control (Exhibit 3, page 12). This is a marked and welcome

[2] In this report, price/book ratio and ROE do not include intangible assets, unless otherwise specified. See the Appendix for definition of terms and more on the databases used in this report.

How they grew

Exhibit A breaks down revenue growth from 2007 to 2014 in eight major regional banking markets worldwide and calculates the effects of changes in volumes (ie, growth in outstanding balances), margins and risk costs on revenues.

In *North America*, the economy returned to near-normal after the crisis much faster than other developed markets, providing a significant tailwind for banks. Incremental wholesale revenues added $120 billion over the period. Corporate lending climbed, as companies sought capital for growth and banks eased credit conditions. North America is the only region worldwide where both retail and wholesale risk costs improved 2007-2014. Asset management is a bigger business here than elsewhere and benefited from rising asset prices. Both retail and wholesale margins fell, however, in synch with the broader interest-rate structure. (Indeed, declining interest rates drove margins lower in most parts of the world.) Margin pressures subtracted $226 billion from revenues. Altogether, revenues grew, but only by $28 billion over the 7 years.

China – indeed most of Asia – is a story of economic expansion. Retail volumes grew, adding $153 billion to revenues, as consumers sought financing for mortgages. Wholesale volumes contributed even more – $341 billion – as banks lent prodigiously, often encouraged by governments. Elsewhere in Asia, India, Indonesia, Malaysia and Singapore also saw significant retail volume growth – to the point that some analysts are concerned about bubbles in retail lending in some markets.

Western Europe continues to lag other markets. More than other regions, Western Europe suffers from slow macroeconomic growth. Banks in Germany, its largest economy, and elsewhere are also constrained by the significant presence of unlisted banks (especially state- and mutually-owned institutions). These problems are enduring and will continue to suppress growth and margins. Retail sales did well, especially investment products. But margins contracted, because of interest rates; a fall in inter-bank rates squeezed the retail business. And in countries on the periphery, a lack of liquidity drove losses on term deposits. The drop in retail margins equated to a loss of $123 billion in revenues. Finally, risk costs remained a drag on revenues.

In *Latin America*, economic expansion was fuelled by commodities booms in Brazil, Chile, Colombia and Peru. That drove increases in both retail ($90 billion) and wholesale ($71 billion) volumes. Growth slowed recently, as commodities booms started to dissipate in 2014. In Mexico, the health of the neighboring U.S. economy and market liberalization drove new sales.

ey grew

Changes in *Eastern Europe* were dominated by events in Russia. After the 2008 crisis, consumer lending and mortgages took off, lifting revenues by $30 billion. As oil prices fell and the country appeared vulnerable, many consumers brought purchases forward, to avoid inflation. Wholesale volumes added $32 billion, as cross-border lending was replaced by credit from state-owned banks. Other Eastern European countries did much worse over the period than Russia, as they did not enjoy the same kind of boom in lending.

Exhibit A

North America experienced declining margins; Asia relied on volumes; Western Europe lagged on most drivers

Drivers of renenue change 2007-2014
$ billion

	2007 revenue	Retail			Wholesale			Asset management		2014 revenue
		+ ΔVolume	+ ΔMargin	+ ΔRisk Cost	+ ΔVolume	+ ΔMargin	+ ΔRisk Cost	+ ΔVolume	+ ΔMargin	
North America	1,114	65	(61)	16	120	(165)	8	43	3	1,142
China	181	153	10	2	341	(10)	(2)	3	(1)	677
Asia (ex-China)	566	81	(41)	5	90	(35)	(3)	10	1	674
Western Europe	898	86	(123)	(27)	39	(108)	(53)	8	(3)	717
Latin America	183	90	(9)	(3)	71	1	(2)	6	(1)	336
Eastern Europe	110	30	3	(9)	32	(36)	(8)	0	(0)	122
Middle East	40	9	4	(3)	13	(0)	(1)	0	(0)	63
Africa	64	16	(3)	(1)	20	(5)	(0)	1	(0)	90

Note: Volume, margin and risk cost changes reflected in revenues after risk costs
Source: McKinsey Panorama—Global Banking Pools

Exhibit 3

The new reality for global banking

		Unsustainable expansion (2002-2007) High double-digit growth, ROE and other multiples at unsustainable levels	Crisis (2008-2011) Negative growth, ROE significantly below COE, value-destroying multiples	New reality (2012-2014) Low single-digit growth, plateaued ROE and multiples, improved cost efficiency
Average ROE		14.0%	7.3%	9.3%
Revenue growth[1]		16.8%	3.9%	4.3%
Emerging markets' share of revenue growth[1]		26.9%	69.0%	77.8%
Tier 1 Ratio		10.5%	12.1%	12.7%
Loan/Deposit	Developed	124.6%	128.8%	108.2%
	Emerging	75.6%	81.1%	81.0%
Price/book value[2]	Developed	2.2	1.0	1.1
	Emerging	2.2	1.7	1.3
Percent of banks with P/BV below 1.0x	Developed	28.4%	66.0%	63.7%
	Emerging	19.2%	27.9%	34.1%
Primary driver of economic growth		Volume	Risk cost	Operational efficiency

[1] Revenues before risk cost

[2] Adjusted book value

Note: Based on a sample of listed banks with >$10 billion in assets

Source: Thomson Reuters; McKinsey Panorama – Global Banking Pools

contrast from the financial crisis and also from the unsustainable expansion of the pre-crisis years.

Those with longer memories have also sensed that banking is returning to its long-run form. They are right: today's ROE is in the middle of the long-term (1980-2015) average range of between 8 and 12 percent. In this sense, banking has not changed much.

All of that provides some comfort to an industry that has seen exceptional volatility in recent years. Yet banks cannot rest easy. Four big question marks are looming on the horizon.

First, the drop in margins is troubling[3] and shows no signs of abating (Exhibit 4). We expect margins to continue to fall through 2020, and the rate of decline may even accelerate. Persistently low interest rates and the digital-driven commoditization of key banking products, especially credit, are cutting deeply into banks' profits. Those dynamics are the subject of the next chapter of this report.

Second, the gap between emerging and developed markets is narrowing. Up-and-coming economies—especially China—have come from nowhere to become a vital part of the global industry. At one point in 2007, emerging market banks reached a price/book value ratio (P/B) of 3.8. Today, however, that figure is 1.3 and is steadily approaching that of developed-market banks (1.2). As markets demon-

[3] Western European banks' net profit margin (to total assets) was only 10 bps in 2013 (resulting in a 2 percent ROE); hence, a small change in efficiency can have a large impact. In 2014, margins declined by 36 bps, due mainly to consistently low interest rates. Costs (to total assets) decreased by 28 bps, as some large institutions undertook radical restructuring programs.

Exhibit 4

Falling margins have the biggest influence on ROE

ROE for 7 regions, 2013–14
Percentage points

Note: Based on a sample of listed banks with >$10 billion in assets.

[1] Western European banks' net profit margin (to total assets) was only 10 bps in 2013 (resulting in a 2% ROE), hence a small change in efficiency can have a large impact. Margin went down by 36 bps, mainly due to consistently low interest rates. Costs (to total assets) decreased by 28 bps, as some big institutions started radical restructuring programs.

[2] Margins declined by 66 basis points 2013-2014. Thus while total assets grew, revenues grew only slightly, especially in India, Malaysia, and Thailand.

Source: Thomson Reuters; McKinsey Panorama—Global Banking Pools

strated in August 2015, investors have serious doubts about some (though not all) emerging economies and about the quality of the credit that these banks have extended. Many are particularly concerned about the loans on the books of Chinese banks.[4] Inasmuch as emerging markets have led global performance in recent years, these signs are troubling.

Third, the differences in performance among geographies go well beyond the emerging/developed divide. ROE in 2014 ranged from 3.2 percent in Western Europe to 17.9 percent in Latin America and 18.4 percent in China. While geopolitical factors have something to do with returns, the profitability of markets continues to be shaped primarily by economic structure, as well as growth and competition. Some markets are overbanked, some have a significant share of state-owned banks, some are in stagnant economies, and some have all three characteristics. Banks in these markets are not participating in the industry's good times. The rising tide is not lifting these boats.

Fourth, the industry as a whole is creating very little value. ROE of 9.5 percent is at or slightly below COE for most banks.[5] To be sure, COE seems likely to fall, in line with the risk-free rate and the industry's beta. That may spur value creation in coming years. In the meantime, the industry struggles to deliver value for investors. Ninety banks out of the 500 we study are

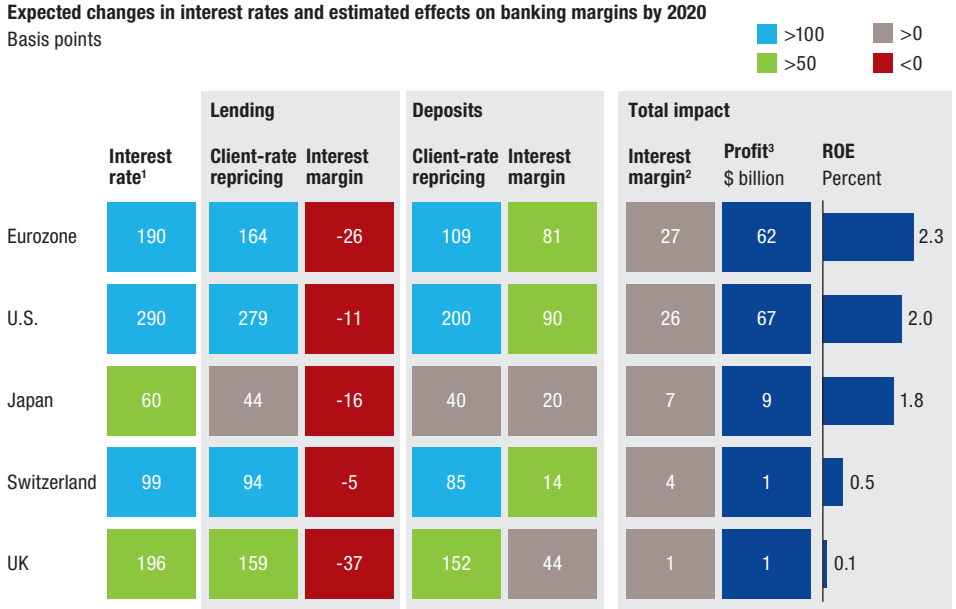
[4] See for example "China Banks' Worst Year Since 2004 Seen as Bad Loans Climb," April 29, 2015, bloomberg.com.

[5] Analysts estimate banks' COE in various ways; the consensus of their estimates is between 10 and 15 percent, depending on the region. In developed markets, consensus estimates are closer to 10 percent; in emerging markets, closer to 15 percent or more. Global COE has risen over time as emerging markets have assumed greater weight in global averages; however it is expected to decrease as market risk premium declines.

Exhibit 5

A large interest rate increase would benefit the Eurozone and the U.S. the most

Expected changes in interest rates and estimated effects on banking margins by 2020
Basis points



[1] Maximum increase calculated between 2014 and the peak year before 2020
[2] Calculated as weighted average of loans and deposits in each region
[3] After-tax profit, assumes constant risk costs

Source: EIU; IHS Global Insight; McKinsey Panorama – Global Banking Pools

generating all of the value the industry creates. Sixty-four percent of developed market banks, and 34 percent of those in emerging markets, have a P/B below 1.0 and ROE well below COE.

The next few years

The upheaval in financial markets in August 2015 introduced new levels of volatility into the global banking system and made the outlook even more uncertain. The "known-knowns," however, remain the same – slow growth, steady ROE, falling margins. In our base-case scenario, the new stability will endure for the next few years. Revenue growth will continue at about 3 percent annually, closely aligned to global GDP. Risk provisions seem well calibrated to actual losses and should stay flat. Margins will continue to erode, but can be balanced to a degree by improvements in operating costs. Capital is largely replenished, with perhaps some small increases to come. While some cases are still pending, it seems likely that legal fines and costs will slow. As a result, ROE will likely continue to track at between 8 and 10 percent.

But given the cracks beneath this stable surface – cracks that may now be widening – the forecast is an uncomfortable one. The banking system is much more volatile than it was between 1980 and 2001, with 40 percent of all banks seen

by investors as so risky or poorly managed that they are not worth their book value. The system is also vulnerable to shocks; paper-thin margins would collapse if a major political crisis, a big drop in asset prices, or widespread recession were to occur.

In our discussions with bank leaders, it seems that many are counting on a rise in interest rates to lift profits. And it does appear that base rates are likely to increase in the U.S. In our analysis, however, even if rates rise broadly – a big if – banks will not do as well as many expect; margins will not jump back to previous levels. Much of the benefit will get competed away, and risk costs will likely increase, especially in economies where the recovery is still fragile. Exhibit 5 lays out the likely impact from rate increases in various developed markets. The analysis considers current interest-rate levels, which help to determine the size of the expected increase, and uses historical rates of change in deposit and lending terms in previous rate rises to estimate what might happen this time. On average, banks in the Eurozone and the U.S. would see jumps in ROE of about 2 percentage points, but these gains would still not lift returns above COE. And as the "taper tantrum" of 2013 showed, the reaction of markets to a change in central bank policy is far from clear; unforeseen problems could easily overshadow any gains from a rate rise.

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The best banks continue to do exceptionally well, but they are greatly outnumbered by weaker institutions. Most of these are treading water, and some are swirling the drain. Help is not forthcoming from structural trends. To improve and sustain performance, banks must master digital technology and make some tough strategic choices. In the next section, we examine the inevitable rise of digitization and how it affects banks, today and tomorrow.

The Digital Revolution

Over the past 20 years, banks' economics have been subjected to three major forces. Capital requirements have risen; Tier-1 capital requirement went from 4.1 percent in 2000 to 7.0 percent on average in 2014. The "financialization" of many national economies (measured as the amount of financial activity per dollar of GDP) rose dramatically from the 1990s through 2007, and then fell. And of course, most banks have lived through extraordinary economic expansions (1990s, 2000s) and declines (1997, 2000-2001, 2008-2009). Yet after all that upheaval, global banking's ROE has changed only slightly, from 8.6 percent in 1994 to 9.5 percent in 2014.

On the surface, then, one might conclude that nothing has changed. And as discussed, the short-term outlook is for more of the same. However, beneath the surface, a radical shift in banks' economics is gathering force. The changes to come over the next 10 years will be less visible than the global financial crisis or the bursting of the dotcom bubble – and yet their impact on banking's economics and even fundamental business models will be much more substantial.

These changes will be primarily driven by two forces: a digital revolution and growing regulation. In this report, we focus on the first: the rapid acceleration of technological change, the likely impact on the industry in the long term, and the implications for the competitive landscape.

The revolution advances

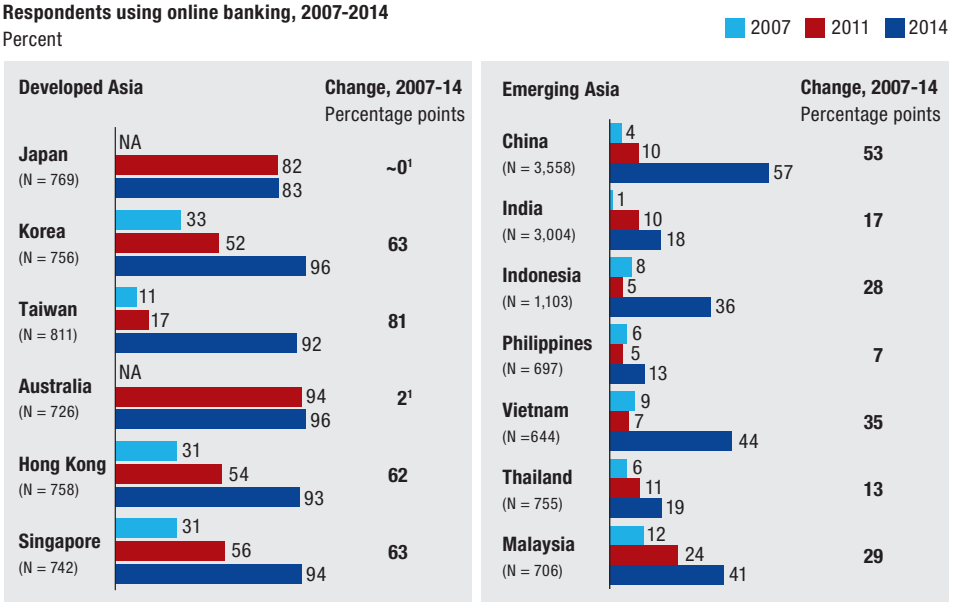
Digitization is rapidly moving ahead. In Asia, for example, where McKinsey has conducted a long-running survey of banking customers, from 2011 to 2014, the number of customers using online services rose considerably in many developed markets – and more than doubled in most emerging markets (Exhibit 6).

Digital is also driving sales, not merely usage. Across developed Asia, 58 to 75 percent of customers have bought a banking product online. The research also found that more customers are willing to try fully digital product propositions (especially for savings). Critically, more than half of current/deposit account and credit-card customers said they would switch banks if a new fully digital provider made an attrac-

Exhibit 6

Customer use of digital is increasing across Asia

Respondents using online banking, 2007-2014
Percent



[1] Change shown is from 2011 to 2014

Source: McKinsey Asia Personal Financial Services Survey 2007-2014

tive offer, and would move at least a third and as much as half their business away from their current bank. To be sure, customers may not be fully considering what it means to switch. So the actual switching rate might not reach 50 percent. Nonetheless, in Asia, it appears that a meaningful fraction of banks' customers are ready to take the plunge. Digital banking looks set to follow the path of adoption of other consumer technologies (radio, television, microwave oven, and many others) – an "S-curve" of rapid uptake.

Rapid digitization is not just a retail concern. Small-business customers also appreciate the benefit and convenience of a good digital proposition.

Rapid digitization is not just a retail concern. Small-business customers also appreciate the benefit and convenience of a good digital proposition. McKinsey's research in Europe found that SME (small and medium-sized enterprises) customers are 4.5 times more likely to choose a bank with a good digital banking platform than one with branches nearby. Four-fifths of the corporate bank leaders who attended McKinsey's North American Commercial Banking Roundtable in April 2015 agreed that digital attackers will soon be a meaningful threat to their business. In capital markets, one asset class after another has gone electronic, a shift that has been exploited by a range of new participants. Cash equities is a case in point: a vast portion of trading is now done by firms that did not exist 15 years ago.

Why are customers ready to switch? There are four main reasons.

First, it should be acknowledged that the bond between bank and customer is typically not strong. The banking experience is usually uninspiring. Customers seldom have a personal bond with the people at their bank.

Second, technology allows for new behaviors that neither banks nor customers can anticipate. As Steve Jobs famously said, people don't know what they want until you show it to them. Well-designed technology permits customers to act on behavioral biases they have always had—to save time, to receive immediate gratification, to socialize with friends, to have the latest technology, to favor the elegant and beautiful over the humdrum and pedestrian, and so on.

Third, the banking industry's reputation was damaged by the financial crisis. The crisis also spawned new rules in many jurisdictions that aim to provide customers with better information, eliminate or minimize conflicts of interest, and unbundle services. The UK Retail Distribution Review is an example; it requires banks to provide customers with more information about the costs they pay for banking services and decouples investment advice from investment products. Indeed, the wealth management industry in Europe is facing an

unprecedented wave of regulatory changes. MiFID II and other rules are expected to ban inducements, raise transparency on fees, and place additional requirements on advisory processes, as well as on conduct and compliance.

In the U.S., more than 60 percent of revenues come from customers 50 and older.

A fourth factor also bears mentioning. The industry faces a double-barreled demographic challenge. Millennials, the children of the digital age, are the next wave of banking customers. And older customers, the industry's bread and butter, are becoming more comfortable with digital. In the U.S., more than 60 percent of revenues come from customers 50 and older. (That is very different from other consumer industries such as telecom and retail, where younger customers deliver the bulk of the profits.) In many markets today, people aged 45 to 65 are the fastest growing group of smartphone users. As older customers become more comfortable using their smartphones, they will gravitate toward functional, elegant, easy-to-use apps and Web services.

A crack in the foundation

The rise of digital presents a major threat to banks' business models. Historically, banks have generated value by combining different businesses—financing, investing and transactions—to serve all of their customers' financial needs over the long haul. Basic banking services are provided at low cost, with the aim of capturing customers. Once customers are in the fold, for example by opening a current/checking account, inertia often settles in, and the bank becomes the default choice, enabling banks to maintain attractive margins in other product areas such as deposits or FX transactions. The customer relationship holds this web of activities together.

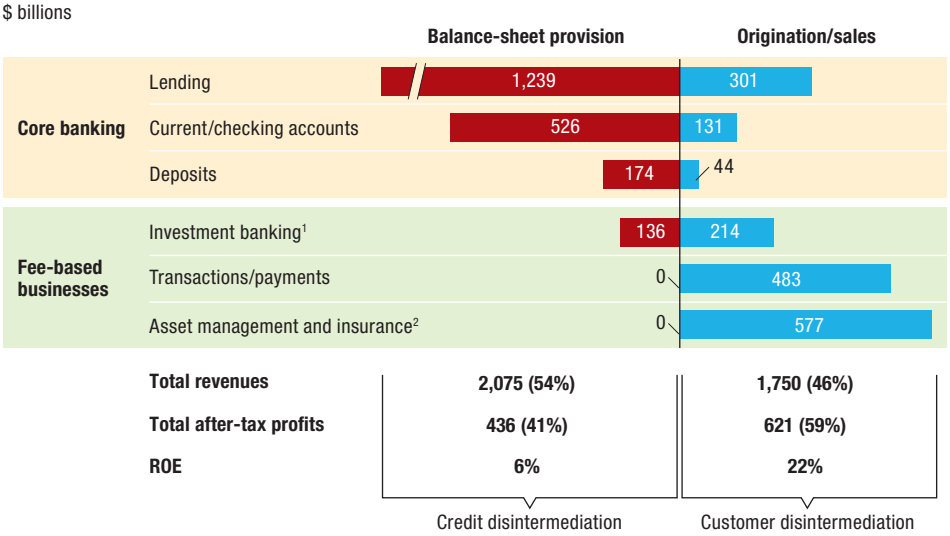
Exhibit 7 (page 20) illustrates the economics of the basic business model. Fifty-nine percent of profits come from the origination, sales and distribution apparatus – customer-facing activities. Banks earn an attractive 22 percent ROE from origination and sales, much higher than the bare-bones provision of credit, which generates only a 6 percent ROE.

When customers are dissatisfied with their banks, they are more inclined to shop around. It has never been easy to switch banks, but new apps and online services are beginning to break the heavy gravitational pull banks exert on their customers. Importantly, most start-ups are not asking customers to transfer all their financial business at once; rather, they are asking for just a slice at a time. Platforms such as NerdWallet, a U.S. startup, and India's BankBazaar.com aggregate many banks' offerings in loans, credit cards, deposits, insurance, and so on. Others, such as fx-compared.com, specialize in a single product. And some platforms, such as moneysupermarket.com, have used a single product as a springboard, and now not

Exhibit 7

Origination and sales – the focus of non-bank attackers – account for ~60% of global banking profits

Global banking revenues and profits by activity, 2014
$ billions



[1] Corporate finance, capital markets, securities services

[2] Asset management includes investment and pension products. Insurance includes bank-sold insurance only.

Source: McKinsey Panorama – Global Banking Pools

only cover the full gamut of financial products, but also extend into energy, telecommunications, travel, and so on. These new services make it incredibly simple for customers to open an account – and once they have an account, they can switch among providers with a single click. In addition, the offers are highly competitive and often more attractive than the terms banks offer on their own websites.

Digital start-ups or FinTechs,[6] as well as big technology companies and the shadow banking sector, have substantial potential to exploit changes in technology and consequent shifts in customer behavior. The incentive is enormous, as capturing even a tiny fraction of the $1-trillion profit pool can mean a fortune to a start-up's owners and investors.

It is no surprise that the number of FinTechs is exploding, and more and more money is flowing into the sector. Between 2013 and 2014, venture capital investment in FinTechs leapt from $4 billion to $12.2 billion. As of August 2015, there were more than 12,000 FinTechs rapidly moving into every banking activity and market (Exhibit 8).

Start-ups offer considerable advantages. For one, they have lower costs than banks, and thus can offer customers lower prices. In mass retail wealth management, for example, FinTechs charge as little as 15 basis points as the advisory fee for the first $100,000 they manage; incumbents routinely charge 100 basis points or more.

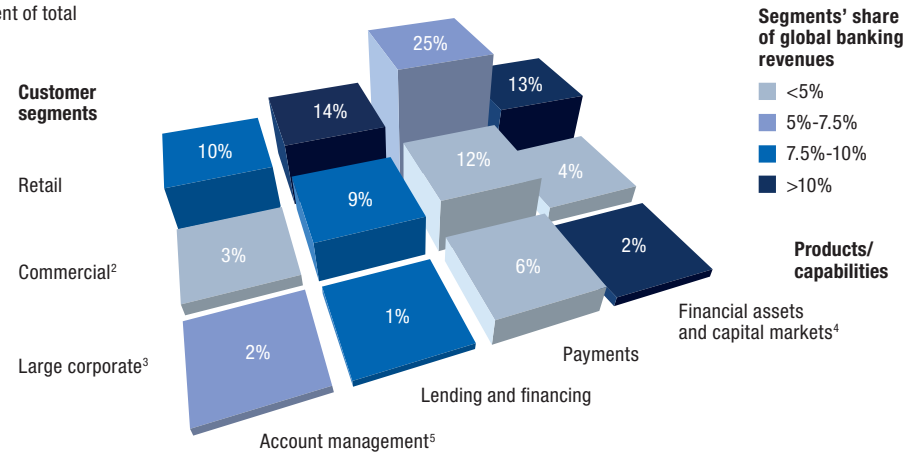
[6] Not all FinTechs are disruptors; others are providing services to banks, and some are collaborating with banks in a symbiotic way.

Exhibit 8

FinTechs are everywhere, especially in payments

Customer segments and products of 350 leading FinTechs, 2015[1]

Percent of total



[1] 350+ commercially most well-known cases registered in the Panorama database, may not be fully representative.

[2] Includes small and medium-size enterprises

[3] Including large corporates, public entities and non-banking financial institutions

[4] Includes sales and trading, securities services, retail investment, non-current-account deposits and asset management factory

[5] Revenue share includes current/checking account deposit revenue

Source: McKinsey Panorama – FinTech

Start-ups are also creating more intuitive and compelling customer experiences. For example, Alipay, the Chinese payments service, and Nutmeg, a UK investment provider, make online finance simpler and more intuitive. Alipay makes a game of savings, comparing the user's returns with others, and also makes peer-to-peer transfers fun, by adding voice messages and emoticons. Nutmeg provides a simple and reliable service aimed at the mass affluent customers that private banks do not serve, promising that if you "tell us about yourself and your goals in less than 10 minutes, then we build and manage your investment portfolio for you." That's a world away from most investment managers and their more involved sign-up processes.

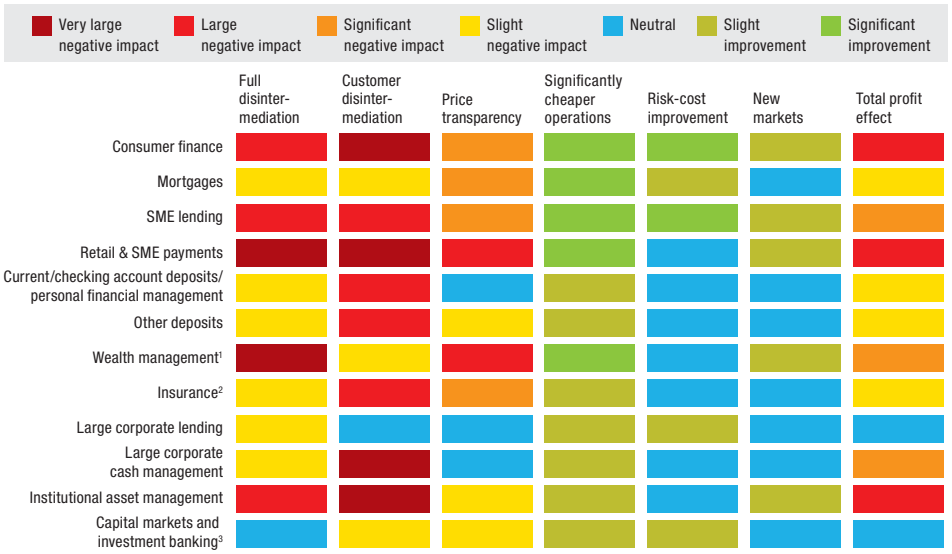
FinTechs also benefit from a culture of experimentation. Obviously, they are smaller and more nimble than a bank. They can take big chances and quickly pivot away from mistakes.

FinTech start-ups are not the only threat to banks. Non-bank giants in technology, e-retail, media and entertainment, telecom and other sectors are seriously considering ways to enter banking. Growth is difficult for these firms, and banking profits are tempting. Many of these companies have built strong relationships with huge customer bases. The primary obstacle to opening a bank is, of course, regulation, and the considerable compliance burden that comes with a banking charter. Most do not want to become a bank. They want instead to skim the cream –

Exhibit 9

Digital's effects vary by product

Direction and scale of impact of main threats and opportunities



[1] Investment products only

[2] Bank-sold insurance only

[3] Includes all investment banking, sales and trading and securities services activities

Source: McKinsey Panorama

the customer relationship and the value that it carries.

Attackers on all sides

Everywhere, new companies are emerging that specialize in improving a particular customer experience. Every time one succeeds in poaching a banking customer, the bank's relationship with that customer weakens. When a retail customer uses one service to save for college, another to aggregate information, and a third to get a "touchless" mortgage, s/he is effectively lost to the bank.

What will happen to the traditional business model when the customer relationship is weakened? The threat varies by business (Exhibit 9). Generally, retail businesses are most at risk; wealth management is also affected at the low end, and disruption may eventually extend to higher-end clients; and wholesale banking is likely to be less affected (in part because it has already undergone a good deal of digital disruption).

More specifically:

- Banking's *core business* of deposit-taking, lending and current/checking accounts for retail customers is subject to and protected by a massive regulatory regime. Even the biggest consumer companies with the deepest pockets blanch at the idea of complying with all the local, national and international rules regarding these businesses. The threat

here is not that others will take the business and the associated balances. Attackers instead want to take over the customer relationship with its opportunities for origination and sales, be it through an aggregator website or an intuitive app. Hundreds of new entrants now sell consumer loans, mortgages, deposits, currency exchange and other basic banking services. In most cases, they do not fulfill the products they sell, but use a bank and its balance sheet to fulfill a loan or deposit, a card provider and its payments "backbone" to fulfill a credit card, an FX broker for currency exchange, and so on.

Margins will come under pressure, and the customer relationship, a platform from which banks sell other, higher margin, fee-based products, will be weakened or might even disappear.

The consequences for banks are quite dramatic. The substantial value that banks generate from distribution may be captured by others. Margins will come under pressure, and the customer relationship, a platform from which banks sell other, higher margin, fee-based products, will be weakened or might even disappear. (For more on lending businesses, see "Credit disintermediation?" on page 24.)

- The *payments* business has already been disrupted to a degree; more may be on the way. Innovation is rampant. Non-banks, such as Apple and Square, are creating new phone-based payments and merchant acceptance solutions. Transferwise and other start-ups are building new peer-to-peer money transfer services. Of particular concern to banks, Facebook has just unveiled a transfer system. It and other "platform" companies with vast customer bases are eyeing the opportunities in customer payments data. New services will likely increase the size of the payments market, as cash usage declines and cross-selling opportunities arise from better use of data. But banks may struggle to capture this growth. Margins may fade as payments bypass banks or credit cards. Regulations like the European Union's Payments Services Directive may be a catalyst for further disruption.
- *SME banking* is similar to retail; banks' costs are high, and the products and services are susceptible to automation and digital channels. Some corporate banking businesses, for example trade finance, are similarly vulnerable. Asset-based lending, syndicated lending, and other complex and custom businesses are more likely to stay with banks.
- Digitization has long since disrupted *capital markets and investment banking* (CMIB). Most obviously, sales and trading have gone electronic in many asset classes, and this trend continues to advance in others. Margins have declined considerably in e-traded markets. (In

Credit disintermediation?

This is not the first time that banks have been threatened. Credit provision used to belong almost exclusively to banks, but they have lost some ground. For example, in the 1980s, junk bonds replaced bank lending for a big swath of corporate borrowers. As a result, banks' share of lending is no longer as large as it once was.

Many in the industry believe that the rise of digitization could represent a new threat to banks' share of lending. To date, we do not see strong evidence of this. For the past 15 years, banks' share of global credit provision (including lending, non-bank loans, securitized loans and corporate bonds) has remained constant (Exhibit B).

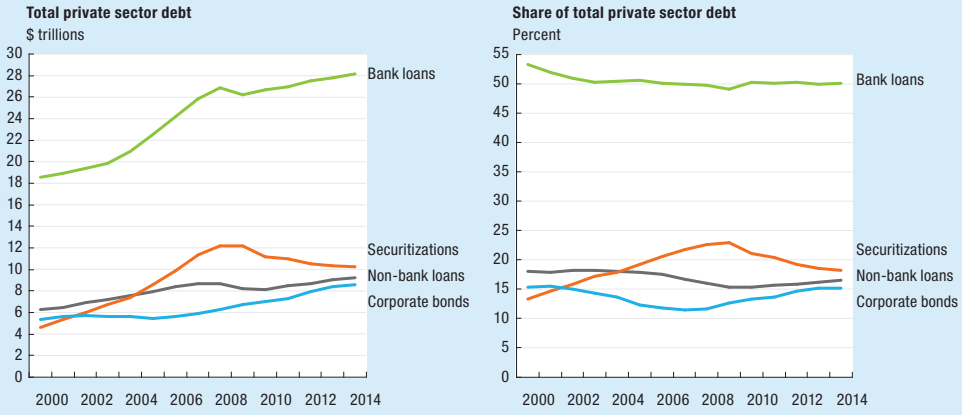
Within this aggregate picture, however, some interesting shifts are taking place. Lending to large companies has fallen because new capital charges have raised banks' costs, making capital markets even more appealing to borrowers already attracted by low rates. Technology is not yet a factor, although it is conceivable that P2P lending could work for certain corporate borrowers.

In household credit, banks have grown their market share, in part because of a decline in securitizations of mortgages, auto loans, and other instruments. Banks have also increased their outstanding volumes. This may change. In the future, it will be increasingly difficult to hold large portfolios of mortgages and other loans on the balance sheet because of leverage-ratio restrictions. Technology will have a significant impact on household credit through P2P lending, a model that is here to stay.

Exhibit B

Banks continue to own the lion's share of credit provision

Outstanding private sector debt in major developed markets,[1] 2000-2014



[1] Australia, Canada, France, Germany, Japan, Netherlands, South Korea, Spain, United Kingdom, United States

Source: National central banks, statistics offices and regulators; BIS; ECB; SIFMA; for some individual data points further country-specific data sources used; McKinsey Global Institute

partial compensation, volumes in some have soared.) New capital requirements and other regulatory reforms have had a dramatic effect on volumes, revenues and profits. In the short term (one to two years), banks can expect further impact from digitization and regulatory reform, as trading in many asset classes shifts to multi-dealer platforms and swap exchange facilities. The additional price transparency they provide will reduce margins.

Over the medium term, CMIB (especially businesses like global custody and cash management) is likely to be less affected than other businesses for several reasons. These are wholesale, not retail, activities. The industry is much more heavily consolidated than retail banking, and big capital markets firms have tremendous scale advantages. Regulatory pressures may provide a spur to innovation and continued cost and risk reduction. Indeed, the pace of regulatory change, especially U.S. CCAR-style capital constraints, may be a blessing in disguise, at least with respect to digital disruption. Few start-ups or other non-banks will have the stomach for the greatly expanded regulatory burden on capital markets activities and instead will look to supply technologies to banks rather than replace them. In 10 years, CMIB may be in an attractive position, with costs and risks taken out and the original threat mostly absorbed.

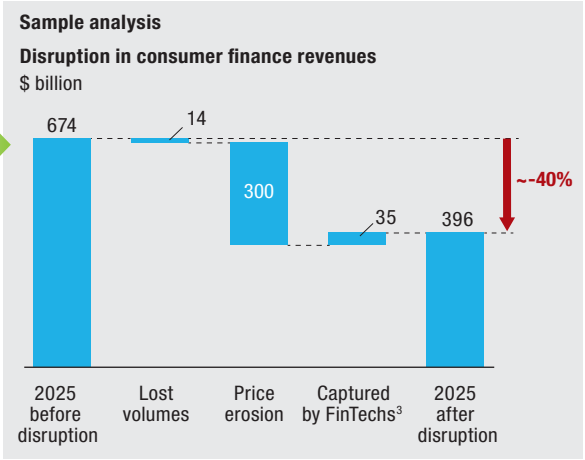
Undoubtedly, while the digital revolution is picking up speed, much of the potential disruption has yet to materialize. With the notable exception of payments, most

Exhibit 10

Five retail businesses have substantial value at risk

Esimated impact of FinTech disruption on five retail businesses, 2025

	Δ Profit[1] Percent	Δ Revenue[1] Percent
Consumer finance	-60	-40
Payments	-35	-30
SME lending	-35	-25
Wealth management[2]	-30	-15
Mortgages	-20	-10



[1] Compared to 2025 projections without the impact of Fintech and digital attackers; profit numbers include the impact of savings on operating costs as a result of digital; revenues are after risk cost, profits are after tax; figures are rounded.

[2] Excluding deposits

[3] Includes currently unbanked segments

Source: McKinsey Panorama

banking activities have proved impregnable. Start-ups have captured tiny market shares in lending, deposit-taking and other businesses. But they are growing quickly. The question is: Can they reach sufficient scale to materially affect banks' revenues and profits?

Estimating the potential

In our opinion, the answer is yes. Attackers are targeting origination and sales, the customer-facing side of the bank. Even a partial loss of direct customer relationships will have a significant impact. Looking at five retail banking businesses – consumer finance, mortgages, SME lending, payments and wealth management, McKinsey found that the risks are widespread. In consumer finance, up to 40 percent of revenues and up to 60 percent of profits are at risk of loss by 2025 (Exhibit 10, page 25). That is equivalent to about 6 percentage points of that business's ROE, which we estimate to be about 10 to 12 percent currently. In payments, 30 percent of revenues and 35 percent of profits are at risk. Other businesses have smaller but still material revenues and profits at risk. These estimates assume that banks continue to cut operating costs on their current trajectory, but do not assume any action on their part to boost volumes, alter prices, or cut other costs.

Naturally, these forward-looking projections require many other assumptions and will vary from country to country. To understand more about the approach we used, see "A look at our methodology" below.

A look at our methodology

In each business we studied, we assessed characteristics like the presence of network effects, scalability, barriers to entry, and so on. We used this to define four expected patterns of disruption – an S-curve of explosive growth, for example, or a straight-line steady shift – like those seen in other industries and technologies. We then made estimates of the forces at work in the given business. For example, in wealth management services for the mass affluent, we estimated that falling prices would erode the industry's margins by one-fourth by 2025. The estimate was based on an analysis of price competition as a result of tech attackers in insurance and observations from recent fee reductions by incumbent wealth managers.

We also estimated the revenues that attackers would capture from banks. To do this, we started with point revenue estimates of a sample of 11 "robo advisors," complemented by specialist research from three major investment banks and research firms. We projected a period of continued strong growth, followed by a period of slower growth. For 2014-2019, we estimated annual growth in AUM of ~137 percent, based on recent growth trends of the robo advisors. Note that the estimate reflects the current small size of attackers' AUM. For 2020 – 2025, we projected growth in AUM at 30 percent.

Finally we validated the findings with experts from McKinsey and the industry.

Why are the implications for banks so serious, especially in lending? In the abstract, banks might expect the following scenario: as margins tighten, revenues will fall. Since operating costs are tied to volumes, not revenues, and since the revenue decline is driven mostly by price erosion, the full effect of lost revenue hits the bottom line nearly dollar-for-dollar. Capital requirements are also tied to volumes, not revenues, meaning they will not decline. This means that banks can only keep ROE constant by significantly lowering their CIR, well below current levels.

In other research, we have also looked at the effect on capital markets businesses. For a top-10 dealer, we estimate that 6 to 12 percent of revenues will be at risk in the next 5 years.

The impact on banks' economics will be widespread. Some tactical repricing may be possible, but over the long term, business models must change radically to reach a much lower CIR than banks have today.

Swing factors

The competition between banks and non-banks will be fierce—and unpredictable. Several factors could swing the balance, none more important than regulation. For the time being, regulators have accepted that risk is moving out of the regulated system – but that may reach a limit, and regulators may decide to stem that tide, by regulating non-banks. Already, the U.S. Treasury is "asking pesky questions" of listed peer-to-peer lenders, including the deal-breaker question of whether they should have "skin in the game."[7]

Regulators' views on large banks also present a potential turning point. If scrutiny increases and big banks find it excessive, as some bankers and analysts say is increasingly likely, they may break up into smaller, more focused entities that are better able to take on the challenge of non-banks.

Cyber security is another critical fulcrum. As more banking revenues move to digital, a big online fraud could dramatically change behavior, sending customers scurrying toward whichever type of institution seems safest.

Another factor is the economic cycle. The majority of FinTechs have not been tested by the stress of a recession. So far, new risk scoring and risk management models seem to have an edge over those of traditional banks. But they have only been used in good times. In an economic downturn, the superiority of these models may disappear, and some of the previously unbanked segments that FinTechs have sold to may prove to be risky. For example, investors in P2P lenders to SMEs may be put off by unexpectedly high default rates, causing them to cut back on investment and funding. Many SMEs that have survived by refinancing will find the reduction in liquidity challenging and default – causing even higher default rates and even lower liquidity. This would strengthen banks' position and lead some FinTechs to close.

Similarly, a rise in interest rates may remove the incentive for investors searching for higher yield – be it through P2P lending, crowd funding, or new deposit and wealth management products. Without this incentive, FinTechs may not be able

[7] "Lending Club: Still growing," Financial Times, August 5, 2015, ft.com.

Digital banking's leapfrog

China's digital commerce is unique among global markets for a variety of reasons, particularly because the nation's internet is protected and set off from global communications networks. Behind this firewall, homegrown digital businesses such as Alibaba, Baidu and Tencent have thrived. They are now ecosystem operators with strong franchises in a wide range of businesses that benefit hugely from the links among them, as customers of one portal are introduced to products and services on the others. Each has substantial operations in financial services.

For incumbent firms, these new ecosystems present a serious threat. In response, many are scrambling to develop new online businesses. Several banks have created sizable new wealth management and payments platforms, some quite successfully. The insurer Ping An has gone several steps further. It has rapidly deployed three financial businesses: Caifu-e, a wealth management service that debuted in 2012, 1qianbao, a payments platform, and Orange, a retail bank, in 2014. The bank is particularly noteworthy. Ping An built it from scratch in six months, and within a year, it had 700,000 customers.

Ping An sees these businesses as essential cogs in its three-layer approach to developing its own ecosystem. In the first layer, the company is building or partnering on platforms to provide vital, everyday services in housing, transportation, food, entertainment and medicine. Critically, these platforms are meant to succeed on their own and also to acquire digital customers who can then be moved to the second layer. In this layer, customers can conduct basic transactions such as payments and accumulating loyalty points. These platforms are tightly integrated with social media and P2P networks. The third layer is Ping An's online insurance business and other financial marketplaces for securities and banking, where customers are served with simple, seamless, customizable apps and products.

Building such an ecosystem is a big undertaking. Ping An set up an innovation center and resources it fully. The innovation center manages a disciplined process to discover new products and services, works with the businesses to pitch new ideas and help incubate new businesses, and serves as the group's venture capital arm.

to reach the scale in customers required for a sustainable model.

Some of the new business models have also not been tested over the long term. Price points are often set low to attract customers, but that may be unsustainable. Consequently, FinTechs might have to raise prices, causing customer attrition and lessening the effect of price erosion on the banking sector.

Finally, some broad-based structural shifts could tip a given region toward faster digitization. Denmark, for example, has adopted legislation that calls for a cashless economy within five years.

A digital strategy

The digital revolution is moving quickly, but not at the same speed in every region. As the novelist William Gibson said, "The future is already here—it's just not evenly distributed." The U.S. is behind Europe in the adoption of fully digital banking services, and even within the European Union, some countries (such as Scandinavia) are

much further along than others in Southern Europe. Emerging markets show similar divides between the digitally advanced and those where the revolution has yet to take off. And China's digital banking market is sui generis – see "Digital banking's leapfrog" on page 28.

Banks will therefore have differing views on the implications of digitization. Sooner or later, however, every bank will have to come to terms with the threat. The revolution will have consequences not just for banks' economics, but also for their strategies. Can banks return their cost of capital in a world where their margins are much lower than they are today? It seems unlikely that the industry can, although individual institutions may succeed.

Ultimately, there are two principal strategic thrusts that can succeed in the new environment. Either banks fight for the customer relationship, or they learn to live without it and become a lean provider of white-labeled balance-sheet capacity. They can even do both, at least in the short to medium term. They might pursue certain customer segments and at the same time lend their balance sheet to non-bank partners. This can be a "win-win" for some banks that do not have a commanding share of the market.

Customer-first banks

If banks choose to master customer relationships, they must create an emotional connection with customers, deliver a superior experience and leverage their data treasure. Three paths seem likely, and others could emerge. These are not fixed business models, but rather tendencies, and banks might successfully find a variant or hybrid that can also be made to work.

- **Focused player.** Banks could choose to focus on those businesses that are less likely to be affected by the digital revolution. Corporate banking may be one such area; custody is another. Banks can divest other businesses and seek to build deep, loyal relationships with their customers. They might also choose to focus on a specific customer segment, to which they provide a range of services. Some institutions that are succeeding with this approach today include USAA (which focuses on a discrete affinity group, U.S. military personnel), Discover (which focuses on consumer credit), American Express (payments), Goldman Sachs (high-end wholesale businesses), and Charles Schwab (mass affluent).
- **Ecosystem owner.** Banks today are not especially known for creating emotional appeals to customers. In part, that may reflect their marketing, but it may also be that banking services are inherently uninteresting to retail customers. A few banks that already enjoy strong customer relationships could counteract that by offering personalized search, shop and buy services across consumer categories. Success would require distinctive skills in big data and a great deal of trust backed by flawless cyber security. Developing a consumer ecosystem[8] would change the playing field for banks, vaulting them from incumbents in a $3-trillion

[8] By ecosystem, we mean a set of linked businesses with a single company at the center. A bank's ecosystem might include dozens of businesses. In its mortgage business, for example, a bank might also offer a property sales app, an estate agent, a mortgage loan provider, a moving company, a home-repair firm, and so on.

What about universal banking?

The digital revolution and regulatory reform pose questions about the future shape of the multi-national universal bank–those that are active in many countries, serving multiple customer segments with a wide range of products. This business model has clear advantages with regard to capital (especially the use of deposits to fund asset-rich businesses) and scope (providing a one-stop shop to clients is the essence of the model). Scale also provides some advantages. Both scope and scale advantages accrue in many wholesale businesses, such as cash management, trade finance and custody, if multi-national operations are integrated.

Domestic and regional banks such as CTBC, HDFC, and OTP continue to do well the universal model. But multinational banks and the handful of banks that are truly global universals are severely challenged, particularly by regulation. Cross-border capital benefits no longer exist in most cases. Multinational banks that are deemed global systemically important banks (G-SIB) need to hold more capital than others and are subject to much stricter supervisory scrutiny (in stress testing, recovery and resolution planning, and bank-holding-company structure in the U.S.), as well as other issues.

Compounding the challenge, big universals are complex animals and are usually slower to respond to external challenges such as digitization. Whether they can restructure to create more scale and scope benefits to compensate for their higher regulatory burden is unclear. It will very much depend on the eventual size of the difference between the capital held in practice by G-SIBS, and the capital held by smaller, more nimble rivals.

One possibility for the universal banking model is that it might pivot away from an emphasis on the low costs associated with scale and focus on other assets: the strong network effects achievable in businesses like cash management, or the structural share advantages in businesses like FX; or a globally branded business, like Citibank's private banking service, Citigold. For such a pivot to be successful, banks will likely have to simplify the business portfolio and improve the organizational construct.

industry to attackers in a $24-trillion one. (In some countries and jurisdictions, it may not be legally possible for banks to pursue this option.) While no bank is implementing this model yet, some early moves in this direction can be seen at Activo (Portugal), DNB Bank (Norway), ICICI Bank (India), iGaranti (Turkey) and mBank (Poland).

- **Community bank 2.0.** National and regional banks might return to their roots, in local communities. By building depth in defined geographies, banks can create a convenient service that cannot be copied by global rivals. Success depends on a distinctive risk appetite (a willingness to lend where global institutions will not), exclusive local business connections, and a simple business portfolio that requires less capital than others, allowing a lower-cost operation. This strategy has natural limits to its scale, making it ideal for relatively small, stand-alone, and nimble institutions.

However, it is also possible for banks to leverage a strong community presence to develop a local eco-system, expanding beyond banking to other consumer businesses.

All of these strategic directions are more focused than the universal model that many banks use today. Questions are mounting about universal banking.[9] It may be premature to state that the universal banking model is obsolete, especially for the largest banks. In certain segments such as custody, a global model seems essential. However, the costs of new global and national banking regulations (which fall disproportionately on the largest banks), coupled with new pressures from non-bank competitors, are eroding the scale and scope avantages of universal banking. For more, see "What about universal banking?" on page 30.

The white-label balance sheet provider

Some banks might choose to embrace the commoditization of their balance sheet. (Other banks must be cautious that they do not fall into this model by default, without properly preparing to execute it.) They will focus on essential activities such as deposits, lending and current/deposit accounts and accept that they might lose the direct customer relationship. They will aim to partner with platform companies, both banks and non-banks, and become their extended balance sheet. In essence, they will become the banking equivalent of server farms, delivering a combination of balance-sheet capacity and operational excellence. If they can cut costs radically and develop strong partnerships, this could be an excellent strategy to disrupt markets. "Leading from behind" might work in banking. A superior cost position, distinctive skills in asset-liability management, and strong B2B banking capabilities are critical for this approach. Banks will need to be large enough to have a competitive cost base but avoid becoming subject to Sifi-like regulation. Banks focused on the essentials could team up, as some Scandinavian banks are doing, to capture greater economies of scale. For example, a group of balance sheet providers might share an ATM network, authentication systems, and IT services and platforms.

■ ■ ■

In the next chapter, we outline the requirements of transformation for the banks that choose to stay and fight for the customer relationship. While we do not focus on balance sheet providers, some of the recommended actions, especially with respect to digital capabilities and cost-cutting, will also help those banks. Although the nature of the banking industry (a reliance on older customer segments, a business driven more by stock than flow) provides ample time and space for such a transformation, those same features make it hard for many banks to act with the necessary urgency and determination. Those that do not seek to transform may well become somewhat digitized, but will likely be stuck in the middle – outwardly modern, inwardly struggling, and moving slowly toward extinction.

[9] See for example "Barclays' Antony Jenkins calls end of universal banking," Financial Times, December 27, 2014, ft.com

Building the Bank of the Future

The fight for the customer has begun, but many banks are not well-equipped to win it. Yes, they have certain advantages, but these advantages are inconsequential to many customers who are happy to buy banking services in a piecemeal way, responding to experiences offered by new providers even if they have no history.

Banks have to beat digital companies at their own game. We do not think that the answer is simply to acquire great FinTechs and integrate them into the business. For one thing, valuations are high. We may be at or near the top of the latest Silicon Valley cycle. Should a bust follow this boom, banks will get a much better picture of the companies that are true survivors – and will get a better

price too. Indeed, the question of a boom is very much on bankers' minds; for more, see "This time it's different – really" on page 34. For another, many FinTechs are building platforms that work with several banks' products. Banks' competitors will surely cease to participate should a rival buy a popular platform.

Change has to be organic, and for many banks, it will be massive. The need arises at an inopportune moment, when banks have been through a wrenching cycle of crisis and reform. Change fatigue has set in, but there is little choice. The good news is that, in a period of upheaval when considerable market share will be up for grabs, ambitious banks can outdo both traditional and new rivals. In fact, new technologies might expand markets by tapping latent demand (as in P2P lending). Incumbent banks could wind up with bigger businesses than today, even after attackers claim some share, as some digital-first banks are already proving.

Managing the work effectively, in a way that allows maximum flexibility as conditions change and provides inspiration to a beleaguered staff, will be essential. This is the beginning of the digital journey, and banks should not attempt to draft a blueprint of what the perfect bank will look like in 10 years. Instead, they need simply to take on the digital challenge with their full energy. Those that do will have a strong advantage over competitors that continue to mull their options. For most banks, these immediate actions fall in two categories: re-imagining the customer relationship and integrating digital approaches deeply into the bank's core. Banks whose digital strengths are already developed can innovate beyond the core, but should manage their innovation carefully.

Put the customer at the center

If banks are going to win the fight for the customer, it follows that they must put the customer at the center of their thinking. Every bank produces feel-good marketing messages, but many have never been truly customer-centric. Instead, banks organize their thinking around products and how to sell them. True, there are some signs of change, in part because of new rules on conduct and consumer protection. But even as they pull back from the hard sell, banks are still using the same model of connecting with their customers. To catch the eye of new consumers – and to develop an emotional connection with them – banks need to take three actions.

To begin, banks need to *shift their cultures* to embrace digital and changing customer expectations. The effort will be severely handicapped if a bank cannot attract and retain the right people – millennial workers with digital skills, who want to work at places that share their priorities: flexibility, agility, innovation. Among other moves, banks have to dig deep to find the teams that demonstrate these qualities and make them highly visible to the rest of the organization.

Secondly, banks need to *revamp their brands* to build an emotional connection to the customer. The old wisdom that bank brands must convey strength and stability is no longer enough. Younger

This time it's different – really

There is no question that there are some striking similarities between today's digital revolution and the dotcom bubble of 2000-2001. However, there are also at least three major differences. The first is mobile technology: personal devices that are always on and always with their users allow for a much broader disruption than the desktop computers of 2009. Another is the scope of today's revolution, invading every element of the value chain, including operations and risk management, not just marketing and sales. The third is demographics: Millennials are becoming the primary buyer of banking services and have grown up with the Internet. Their behavior is fundamentally different than older consumers.

Investors are recognizing those differences, and venture capital today looks nothing like the business of 15 years ago. The economics of start-ups are radically lower than before. The addressable market of new companies is at scale – 3 billion people are online today, compared to 400 million in 1999. Consumers are used to spending money online; e-commerce is 15 times bigger today than in 2000. In the words of Andreesen Horowitz, the prominent venture capital firm, "It's different this time. But, it's always different."[10]

As banks digitize, they need to make sure they learn from the mistakes of the early 2000s. Banks need to:

- Put more focus on sustainable development of fundamentally new offerings and business models, rather than just fancy features.
- Overhaul most of their traditional ways of operating
- Subject their portfolio of digital ideas to intense scrutiny, carefully nurturing the best ones
- Prepare for the inevitable downswing in the tech-innovation cycle to ensure they will achieve sustained success over the long term.

[10] Morgan Bender, Benedict Evans, Scott Kupor, "U.S. tech funding – What's going on?" June 2015, a16z.com

customers put their trust in emotionally appealing brands, and above all in technology. Banks need to carefully assess their brands. While preserving the equity in their brand, they should reposition and rebrand the bank to appeal to millennials and compete effectively in the digital era.

Successful brand transformations in banking are rare. Other sectors such as consumer goods, consumer electronics, luxury cars and some airlines offer insights. Some companies have succeeded by rebuilding their brand to emphasize new forms of value. Others have focused on intuitive customer experiences or distinctive product features.

For example, Audi was a mass brand in the 1970s, and its cars were considered rather boring. In the late 1970s, it set out to transform and reposition its brand. What followed was a 20-year journey through new technology (for example, Audi was the first car maker to offer four-wheel drive in sedans), investments in racing, legendary Italian designers, product innovations and marketing to its position today, in a league

with Mercedes and BMW, the traditional German luxury car brands.

Banks can accomplish similar transformations, if they have the stamina and the dedication for an extensive effort. To begin with, a successful brand transformation must be led by top management. Banks need not limit themselves to what the market and the industry look like today; they can create a new brand with a view to the industry's digital future. But they must also consider their heritage, their strengths and their distinguishing characteristics. Above all they must identify and adopt brand attributes that reach customers emotionally. Accomplishing all of this is, to say the least, a considerable challenge. Banks can find help in tools that assess brand equity and performance.

It is also critical for banks to invest in engaging employees, who are often the primary representatives of the brand to customers.

It is also critical for banks to invest in engaging employees, who are often the primary representatives of the brand to customers. They should translate their brand promise into guiding principles for how everyone in the bank, at every level, does his or her job. Similarly, the brand's attributes should be embedded in its operating systems.

Finally, in tandem with revitalizing their brand or rebranding the bank, banks need to *re-imagine the customer experience* so that it reflects and supports the new brand positioning. Retail banks are sitting on a treasure trove of data, including logs of customer interactions with the IVR, the website and employees, as well as point-of-sales data. This information can yield immediate insights into interactions and how to improve them, such as poor IVR prompts or unclear website navigation.

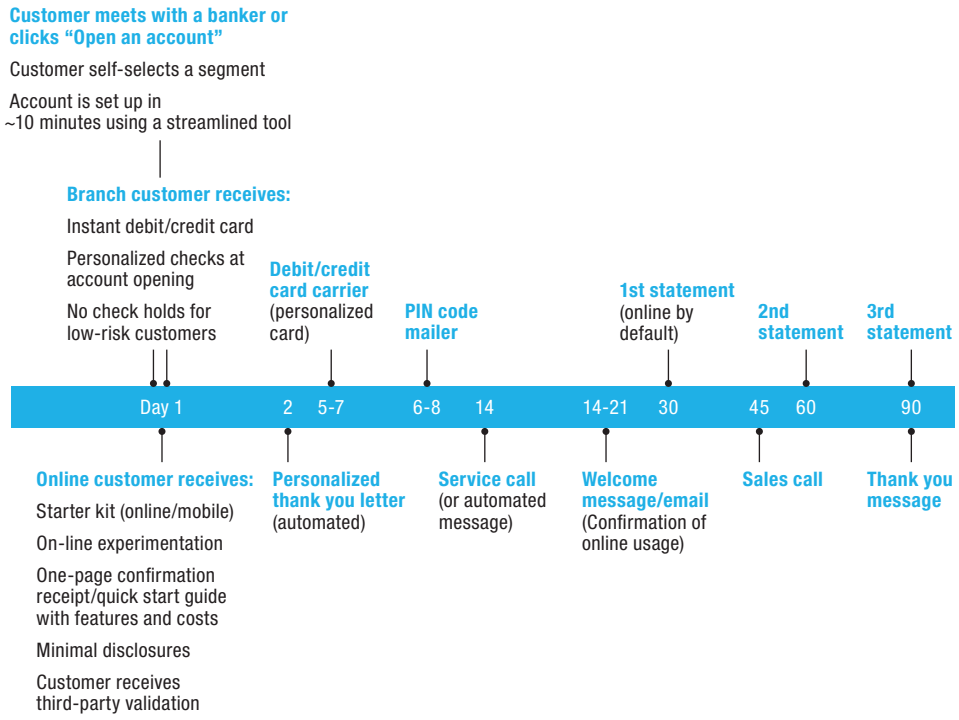
In capital markets, banks can use a different means to accomplish the same objective of enhancing the customer experience. The problem is that CMIB banks tend to provide all clients with all services, which is expensive for the bank and not necessarily helpful to the client. A client-centric approach focuses on revenues and expenses at the client level and providing clients with the right set of services to meet their needs cost-effectively.

Over the longer term, both retail and wholesale banks should invest to better understand the journeys that customers take through the bank's various touch points and how rewarding that experience is. For a retail customer, opening a current/checking account is the single most important determinant of the longer-term relationship, in part because about three-quarters of all cross-sell opportunities arise in the first three months of a relationship. For SME and mid-market corporate customers, the application for credit is similarly crucial.

Few banks, however, understand exactly how that customer experience unfolds. New software can analyze millions of clicks, calls and branch visits, and understand the paths that customers take,

Exhibit 11

A new customer welcome experience



Source: McKinsey & Company

along with the quality of the experience. Banks can then rewrite the processes that underpin the experience, making changes that are experienced by the customer. Exhibit 12 shows how one retail bank redesigned its account-opening experience. Much of the redesigned process has been automated and standardized, culminating in digital channels that provide an intuitive, personal and emotionally appealing customer experience at a fraction of the previous cost.

Build digital at scale

The skills and technology needed to create a compelling digital experience are often in short supply. That is why many banks also need to focus on a second programmatic change: building digital capabilities at scale. An assessment of the bank's current competitive circumstances and an inventory of its current skills can suggest the right places to focus. There are four functions where many banks will want to invest.

Data and IT architecture: Where digital lives

As digitization accelerates, data becomes an even more valuable asset. It is the essential ingredient in capturing the customer. Yet we estimate that banks are currently realizing only 10 to 20 percent of the poten-

tial value of their data. With so much at stake in the digital revolution, banks must claim more. Four actions are essential:

- **Design a new model for data governance and management.** Banks should specify data ownership and responsibilities, up to and including designating a chief data officer. Data ownership should be clear in all data-intensive processes (including budgeting and regulatory processes). Policies and approaches to ensure data quality should be rewritten.

Today many banks are happy if costs rise in line with inflation. But the fight for the customer cannot be won with today's cost base.

- **Radically innovate data technology and architecture.** A superior data infrastructure is the essential engine to extract value from customer data. A "data lake" is an emerging solution for many banks. In a data lake, all kinds of data, structured and unstructured, internal and external, are gathered. Data does not need to follow strict rules when it enters the bank (as it does in a data warehouse). Rather the user of data defines the rules when extracting data from the lake. Combined with Google-like search technology, the data lake enables a step-change for banks to leverage their data for all purposes such as marketing, risk and finance. Banks should also develop reporting engines (based for example on semantic technologies) and ad-hoc reporting capabilities.
- **Upgrade procedures used to aggregate data and produce metrics.** Consistency and accuracy in the metrics and reports that drive decision making is essential. Banks need common data aggregation and reporting procedures for all users (risk, finance, business) that ensure the use of common sources, data definitions, calculation methods and business rules.
- **Simplify data assets by domain and drive integration across silos.** Banks should develop a taxonomy of data domains and use it to align and rationalize duplicative data sources across silos. For example, they might aim for a single deposits platform across all consumer businesses and regions. Similarly, banks should drive consistency by integrating functional data stores, for example a common store for risk finance data.

Operations: A step-function reduction in costs

In the turbulence of the crisis, every bank cut costs. As fast as they cut them, however, new costs were added, especially in compliance. Today many banks are happy if costs rise in line with inflation. But the fight for the customer cannot be won with today's cost base. As revenues shrink but capital requirements stay the same, banks will need to dramatically lower CIR.

We estimate that incumbents' costs exceed attackers' by at least 25 to 30 per-

cent, and in some cases more. Incremental cost cuts will be insufficient. To get the scale needed, banks have to rethink the way they operate, especially in origination and distribution, where the battle for the customer is concentrated. Digitization will be the biggest weapon in their arsenal, but there are others, such as simplification of the product portfolio; offshoring, outsourcing and near-shoring; and IT transformation. In capital markets, banks can save by creating utilities for common tasks such as gathering "know your client" information.

In Europe, more than a dozen banks have replaced older statistical-modeling approaches to credit risk with machine-learning techniques.

Risk management: Into the machine age

If banks want to deliver on their digital aspirations, risk management needs to raise its game. In 10 years, risk management functions will look radically different. A large portion of today's work will be obsolete, while risk analytics and software development will be more important. The most obvious example is the need for instant automated credit decisions. Important advances in credit scoring are being made every day, by firms such as Alibaba and Amazon (which use financial history on their platforms), Kabbage (which uses package delivery and social media data), and the partnership of BBVA Compass and OnDeck (which uses still other datasets, including cash flows, past credit use, vendor payment history, and review sites like Yelp).

Some banks are entering the fray. In Europe, more than a dozen banks have replaced older statistical-modeling approaches to credit risk with machine-learning techniques, and experienced up to 20 percent increases in cash collected.[11] To be sure, new risk techniques can create new problems, which banks will also have to manage. For example, unstructured data like social media posts can yield insights, although extracting the signal from the noise is prone to error.

Software is not the only answer. Banks will need to eliminate decision-making biases through a redesign of processes and meeting structures. And credit risk is not the only arena. As financial risk management becomes more automated, the focus will shift toward compliance and operational risk. Regarding the latter, banks should pay attention to attackers like Ripleshot, which uses a variety of non-traditional data techniques to monitor POS terminals for data breach and fraud.

Distribution: Data-driven acquisition

Attackers are intently focused on distribution, the seat of the customer relationship. To cope with attackers' advantages in cost and customer experience, banks must provide seamless multi-channel connectivity, use technology and analytics to improve the user experience, develop segment-specific pricing, and find ways to build their

[11] Dorian Pyle and Cristina San Jose, "An executive's guide to machine learning," McKinsey Quarterly, June 2015, mckinsey.com.

emotional connection with customers, all at a much lower cost than today.

Machine learning can help banks better understand the products customers want to buy next. For example, some banks are using these techniques and feeding the output as suggestions to relationship managers. Some European banks using these techniques report 10 percent increases in sales of new products, 20 percent savings in capital expenditures, and 20 percent declines in churn. The banks have achieved these gains by devising new recommendation engines for clients in retailing and in small and medium-sized companies. They have also built micro-targeted models that more accurately forecast who will cancel service or default on loans, and how best to intervene.

Historically, most banks have not managed innovation centrally.

Timing the digital effort

Some bankers say that the aspiration held by many, to digitize the whole bank, sets up a risk of unreasonable expectations. In our view, the critical element is time. The FinTech threat is growing, but banks have time on their side – for now. There is plenty of time to digitize the enterprise—two to three years—before competitive intensity becomes uncomfortably hot.

Obviously, the work is complex and should be structured with clear short and long-term objectives. In IT architecture, for example, banks should respond now to regulatory requirements (such as BCBS 239) by building a unified front-end layer that makes available critical risk reports. At this early stage, they should also establish the desired target state for data governance, management and technology. After that, they should tackle problems in data aggregation and reporting by building the data lake or another sophisticated data hub and define valuable and innovative use cases for big data, while maintaining progress toward the target state.

Managing digital innovation

Historically, most banks have not managed innovation centrally. Product groups and other teams came up with ideas that were approved by desk or business heads. Only a few institutions had formal committees and processes to evaluate new products. That is changing quickly, primarily because of regulators' interest in ensuring the appropriate risk review of new ideas. As a result, in 2014, Deutsche Bank announced a new bank-wide framework for approving new products and a systematic and regular review of new and existing products. Other banks have done the same.

While risk is a vital lens, it is not the only one. The pressure of digital competition creates an imperative for banks to manage innovation centrally, especially digital innovation. Resources are limited, and digital talent may be the scarcest resource of all. Banks have to make vital decisions about the digital marketplace—should they emulate the competition? partner with them or acquire them? or simply ignore them? They

can then allocate capital, digital skills and leadership to digital projects accordingly.

Exhibit 12 lays out a scheme to help banks manage digital innovation. Over three time horizons (immediate, one-to-three years and more than three years), banks can plot their ideas and projects and make sure that each receives the right resources.

Briefly, the three horizons are:

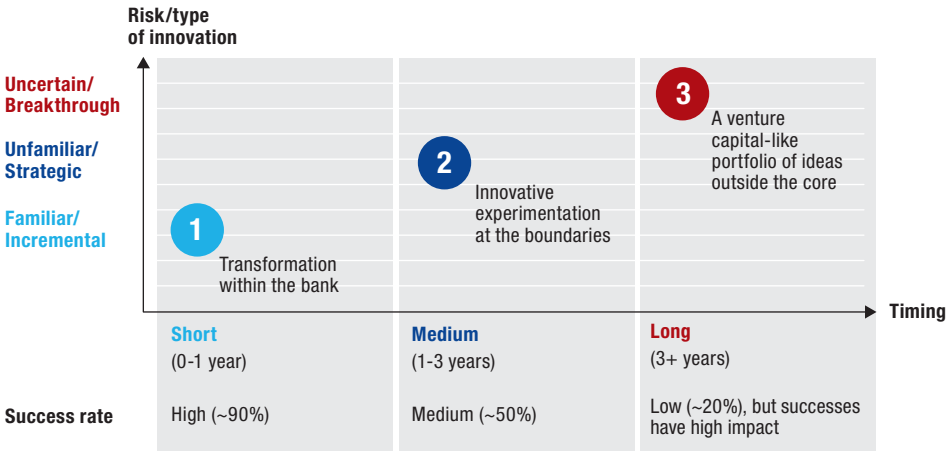
Transformation within the bank. Some projects must be put on the fast track and executed immediately. Naturally, these will typically be ideas to improve internal processes and services – tasks that are most familiar to banks and the easiest to accomplish quickly. Such projects might include introducing big-data analyses into risk, digitizing the in-house portion of the customer experience, and new mobile-payment solutions. Banks can expect projects in this category to be successful most of the time.

Innovate at the boundaries. Banks can establish start-up-like groups in a non-bank subsidiary, or a unit that is independent from IT and normal business functions. They might also set up incubators. Small groups, set free from the strictures of the parent, can tackle finance-related ideas in loyalty products, coupons, and adjacent sectors like real estate. The key is to keep the teams small, independent and moving at maximum speed and fluidity. Banks will have to manage incubators carefully, remembering the problems that such organizations encountered in the dotcom bust. Banks should aim for a 50 to 60 percent success rate with these ideas. Capital One, Commerzbank, Deutsche Bank and UBS are among the institutions that have set up specialized digital labs.

Setting up an independent digital bank is also an option, as Discover, ING Direct and iGaranti have done. The costs to build a digital bank will not dilute earnings

Exhibit 12

A managed approach to digital innovation



Source: McKinsey & Company

if the unit is independent, and the new unit could receive a more favorable valuation from investors.

Develop ideas outside the core. As Ping An and others have shown, banks can generate digital traffic and usage from data-driven services that have nothing to do with banking: virtual marketplaces, MOOCs and other education services, even online dating. While banks should make good-faith efforts to build profitable services, the real upside will come from bringing customers of these new services into the bank, as a cross-sell. A portfolio of unrelated digital ideas can provide access to millions of customers and tens of thousands of institutional and corporate clients. A success rate of 20 to 30 percent, somewhere between that of a VC and a private equity firm, would substantially improve the distribution of even a large bank.

The fight for the customer is on. We hope that this report provides useful ideas for banks as they take up the challenge and seek to build stronger institutions and a healthier financial system.

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Appendix

Definition of metrics

1. **Return on equity (ROE).** Total accounting net income after taxes divided by average total equity.
2. **Revenues.** Total customer-driven revenue pools after risk costs.
3. **(Revenue) margin.** Revenues before risk cost divided by average total assets.
4. **Risk cost (margin).** Loan loss provisions divided by average total assets.
5. **Price to book value (P/B).** Market capitalization divided by average total equity less goodwill.
6. **Market multiples.** Measured as the weighted average of individual banks' price-to-book (P/B) and price-to-earnings (P/E) ratios within a specified country or region.

Databases used in this study

We used three primary databases to derive the data aggregates presented within.

Panorama – Global Banking Pools (GBP). A proprietary McKinsey asset, Global Banking Pools is a global banking database, capturing the size of banking markets in more than 90 countries from Kazakhstan to the United States, across 56 banking products (with 7 additional regional models covering the rest of the world). The database includes all key items of a balance sheet and income statement, such as volumes, margins, revenues, credit losses, costs and profits. It is developed and continually updated by more than 100 McKinsey experts around the world who collect and aggregate banking data from the bottom up. The database covers the client-driven business of banks, while some treasury activities such as asset/liability management or proprietary trading are excluded. It captures an extended banking landscape as opposed to simply summing up existing bank revenues, including not only activities of traditional banks but also of specialist finance players (for example, broker/dealers, leasing companies and asset managers). Insurance companies, hedge funds and private-equity firms are excluded. The data covered for each country refer to banking business conducted within that region (for example, revenues from all loans extended, deposits raised, trading conducted, or assets managed in the specific country). The data cover 14 years in the past (2000–13) and 7 years of forecasts (2014E–20).

Panorama – FinTech. A proprietary McKinsey asset, Panorama FinTech is a curated multidimensional searchable database cataloguing financial technology (FinTech) innovations globally. The database contains more than 1500 FinTech innovations from across the world categorized across eight dimensions relevant to banks and insurers, such as customer segment, banking product and value-chain segment. It has deep-dive profiles on more than 450 of these innovations, including key functionalities, distinctive features, impact potential and achievements to date. The database is developed and maintained by a team of FinTech experts and is continually expanded based on the latest research findings.

Thomson Reuters banking. A database of the key profit-and-loss, balance-sheet and other financial metrics of the top 500 banks by assets, sourced from Thomson Reuters. All banks are clustered individually into countries (based on their domicile), regions and specific bank types (based on a classification of 14 different bank types). The data cover 14 years (2000–13), with a varying number of banks available in different years.

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